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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/532,907	03/21/2000	Douglas J. Holmi	02103-36601	6793
26162 7590 03/14/2007 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER SWERDLOW, DANIEL	
			ART UNIT 2615	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/532,907	<b>Applicant(s)</b> HOLMI ET AL.	
	<b>Examiner</b> Daniel Swerdlow	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 32-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/27/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 32, 36 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh et al. (US Patent 5,146,507) in view of Phillips (US Patent 4,210,784).
4. Regarding Claim 32, Satoh discloses an audio system (Fig. 2) for an automobile 22 having a passenger compartment 23 with two front seats that correspond to the two seats claimed comprising: an audio source (10, 12, 14, 16) processor 18 and amplifier 20 arrangement that corresponds to the audio source claimed and has a plurality of output channels (FL FR RL RR) including a surround output channel (RL and/or RR) (column 5, lines 17-36), with the two seats positioned side by side. As such, Satoh anticipates all elements of Claim 32 except a first plurality of substantially identical electroacoustical transducers for radiating sound waves corresponding to the surround channel positioned in said passenger compartment such that an occupant in any of the two of the seats is forward of, in a direct field of, and positioned substantially identically relative to a corresponding one of the electroacoustical transducers. Phillips discloses a speaker system (Figs 7-10) for an individual automobile seat (column 2, lines 19-26) for radiating sound waves from the quadrasonic (i.e., surround) output of a receiver

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(column 8, line 63-column 12, line 5). As such, with the speaker system of Phillips applied to each of the front seats of the audio system of Satoh, there is a first plurality of substantially identical electroacoustical transducers for radiating sound waves corresponding to the surround channel positioned in said passenger compartment such that an occupant in any of the two of the seats is forward of, in a direct field of, and positioned substantially identically relative to a corresponding one of the electroacoustical transducers. Phillips further discloses that the speaker system provides stereo enhancement and clarity enhancement and enhancement of brightness and brilliance of tone which far surpasses that available in conventional quadraphonic systems when used with a receiver having quadraphonic output capability as compared to a conventional quadraphonic system with a second set of speakers positioned in the room to the rear of the listener but at a considerable distance therefrom, rather than immediately behind the listener's ears. As such, it would have been obvious to one skilled in the art at the time of the invention to apply the speaker system taught by Phillips to the car audio system taught by Satoh for the purpose of realizing the aforesaid advantages and making those advantages available to both seats' occupants.

5. Regarding Claim 36, in addition to the elements cited above apropos of Claim 32, Phillips further discloses positioning the speakers in a seat-back (Figs. 7-10).

6. Regarding Claim 40, in addition to the elements cited above apropos of Claim 32, Phillips further discloses a set of speakers corresponding to an individual seat (Figs. 7-10).

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7. Claims 33 through 35, 37 through 39 and 41 through 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoh in view of Phillips and further in view of Kishinga et al. (US Patent 5,131,051).

8. Regarding Claims 33, 37 and 41, as shown above apropos of Claims 32, 36 and 40, respectively, the combination of Satoh and Phillips makes obvious all elements except the plurality of transducers being coupled to a single equalizer. Kishinga discloses a sound field control system (Fig. 2) that uses a single equalizer 21 to control a plurality of parallel loudspeakers (25, 26) (column 7, lines 7-14). One skilled in the art would have known that such an arrangement provides economy by avoiding duplication of components. As such, it would have been obvious to one skilled in the art at the time of the invention to apply the single equalizer to control a plurality of parallel loudspeakers taught by Kishinga to the combination made obvious by Satoh and Phillips for the purpose of realizing the aforesaid advantage.

9. Regarding Claims 34, 38 and 42, Phillips further discloses each seat having left and right transducers corresponding to left and right quadraphonic channels and positioned as claimed with respect to their respective seats' occupants (Figs. 7-10).

10. Regarding Claims 35, 39 and 43, Kishinga discloses a sound field control system (Fig. 2) that uses a single equalizer 21 to control a plurality of parallel loudspeakers (25, 26) (column 7, lines 7-14). One skilled in the art would have known that such an arrangement provides economy by avoiding duplication of components. As such, it would have been obvious to one skilled in the art at the time of the invention to apply the single equalizer to control a plurality of parallel loudspeakers taught by Kishinga to each channel of the combination made obvious by Satoh and Phillips for the purpose of realizing the aforesaid advantage.

***Response to Arguments***

11. Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

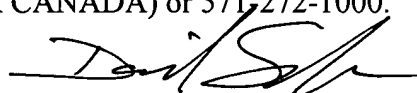
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period; then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel Swerdlow whose telephone number is 571-272-7531. The examiner can normally be reached on Monday through Friday between 7:30 AM and 5:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Daniel Swerdlow  
Primary Examiner  
Art Unit 2615

ds  
6 March 2007